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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,592	12/28/2005	William E Tuggle	20371-00011US-US	3891
30678 7590 09/13/2007 CONNOLLY BOVE LODGE & HUTZ LLP 1875 EYE STREET, N.W. SUITE 1100 WASHINGTON, DC 20036			EXAMINER STORMER, RUSSELL D	
			ART UNIT 3617	PAPER NUMBER
			MAIL DATE 09/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/531,592

Applicant(s)

TUGGLE, WILLIAM E

Examiner

Russell D. Stormer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/18/05</u> . | 6) <input type="checkbox"/> Other: ____ |

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the vehicle frame of claim 40, the axle interconnecting the rim and the frame of claim 40, and various vehicles set forth in claim 44, and the pin and the mold of claim 49 must be shown or the feature(s) canceled from the claim(s).

No new matter should be entered.

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the inside diameter of the housing 110 being up to one-half the outside diameter of the barbs 130, and further being at least 50% of the outside diameter of the valve stem 120 as described in the specification. While such dimensions may be derived from figures 3a and 3b, reference characters are needed to show where the measurements are taken from.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

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changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

On page 7, the reference character 120 is used for both the barbs and the valve stem.

On page 14, the word - -radially- - should be inserted before "inwardly" in the third line from the bottom in order to be provide proper antecedent basis for the flange as it is set forth in claims 9 an d28.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3, 7, 12, 17, 21, 26, 27, 32, 42, and 46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 3, 17, and 42, the phrase "is less than at least about 50%" indefinite as the diameter of the valve stem housing in relation to the valve stem cannot be determined. If the diameter is "less than at least 50%," can it be greater than 50%? Could it be less than at least 60%?

Claims 7 and 21 are rejected as indefinite because the phrase "similar to polyurethane" does not adequately describe the material. It is not clear which materials would be included in the group and which ones would be excluded as being "similar."

Claims 12 and 32 state that the inelastic material "flexes or flattens," and are indefinite as they appear to contradict claims 1 and 15, which state that the material "will not deform." It is submitted that flexing is a type of deformation.

In claims 26 and 27, the "cylindrical flange portion" lacks antecedent basis. The "inner surface" lacks antecedent basis and the claim is not clear what the inner surface is part of.

In line 2 of claim 46, the term "at least one providing the vehicle..." does not make any sense.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuggle in view of Wolfe.

Tuggle (U.S. Patent No. 6279631) meets all of the limitations of the claims with the exception of showing specific details of the valve element.

Wolfe teaches a valve and valve stem assembly comprising a valve stem having a plurality of barbs 11, a cylindrical body portion 8, and a valve assembly (either 15, 20 and 21, or 23). The valve stem is inserted in an opening in a tire as shown in figure 2. The opening forms the valve stem housing. The barbs 11 grip the sidewall of the opening and retain the valve stem in the housing. The outside diameter of the barbs is at least 1.5 to 2.0 times the diameter of the opening in the tire. Although the barbs are shown to be helical, they are considered to meet the limitation of a plurality of barbs.

From teaching of Wolfe it would have been obvious to provide the wheel and tire assembly of Tuggle '631 with an insertable valve stem such as that of Wolfe in order to easily supply the tire with a valve stem. It should be noted that Tuggle '631 states that any conventional valve stem may be used in the sealable opening.

With respect to claims 46-48, the method of moving the vehicle of Tuggle '631 across a surface is inherently taught by the reference.

The manner in which the tire is made, i.e., blow molded, is given no patentable weight in the product claim.

8. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tuggle '631 in view of Molnar

The tire of Tuggle '631 is blow molded, but method for forming the valve stem opening is not specified.

Molnar teaches a method of molding a polyurethane tire for a wheel assembly comprising attaching a pin means 90 to the mold 80, adding polyurethane material to the mold, blow molding the tire into shape, and removing the pin to create the inside diameter of a valve stem socket. A valve stem 43 or 112 is then inserted into the socket.

From this teaching it would have been obvious to form the valve opening of the tire of Tuggle '631 during blow molding of the tire through the use of a pin in the mold as this is well-known in the art and would provide a reliable method of forming the opening, and would eliminate a subsequent step such as drilling an opening in the tire after molding.

The valve stems of Tuggle '631 and Molnar are not shown to have a plurality of barbs, but such barbs are well-known in the art and to provide them would have been obvious in order to secure and retain the valve stem in the socket or opening. Official Notice is hereby given with respect to the barbs on a valve stem.

Information Disclosure Statement

The information disclosure statement (IDS) submitted April 18, 2005 has been considered by the examiner.

It should be noted that the IDS does not the 6279631 patent to Tuggle, or the 3470933 patent to Molnar which was cited in the earlier 4538657 patent to Tuggle.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references other molded tires and valve stem assemblies.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell D. Stormer whose telephone number is (571) 272-6687. The examiner can normally be reached on Monday through Friday, 9 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/5/07

R. Stormer 9/5/07
RUSSELL D. STORMER
PRIMARY EXAMINER